

Patent Claims

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1. Process for attaching the oil sump (10) to an engine block (30) of a combustion engine, a seal being made between the engine block (30) and the oil sump (10) by means of a curable composition (20), characterized in that
 - a curable composition (20) is used whose adhesion when cured is sufficient to secure the oil sump (10) to the engine block (30).
 2. Process according to claim 1, characterized in that a curable composition (20) with an adhesion of at least 0.5 N/mm^2 , especially of more than 0.8 N/mm^2 , is used.
 3. Process according to claims 1 or 2, characterized in that the curable composition (20) is a silicone composition.
 4. Process according to one of claims 1 to 3, characterized in that an oil sump (10) stamped from steel sheet or made from plastics material and a cast aluminum or grey cast iron engine block (30) are used.
 5. Process according to one of claims 1 to 4, characterized in that the oil sump (10) is fixed to the engine block (30) at least during the curing of the composition (20).
 6. Process according to claim 5, characterized in that threaded bolts are not used as fastening elements and in that the edge of the oil sump is designed such that a self-fixing takes place when the oil sump (10) is joined to the engine block (30).
 7. Process according to claim 6, characterized in that the oil sump (10) has a fixing edge (16) and the engine block (30) has a flange (34) and in that the fixing of the oil

sump (10) takes place by the snapping of the fixing edge (16) onto the flange (34).

8. Process according to claim 5, characterized in that barb-like tongues (18) which rest against a flange (34) on the engine block (30) are formed at the edge (12) of the oil sump (10).
9. Process according to claim 5, characterized in that the edge of the oil sump is designed such that the oil sump (10) is fixable to the engine block (30) by a reshaping process taking place after joining.
10. Process according to claim 5, characterized in that after the oil sump (10) has been joined to the engine block (30), holding clamps (40) are attached in order to fix the oil sump (10) to the engine block (30).
11. Process according to one of the claims 1 to 10, characterized in that there are formed on the oil sump (10) and the engine block (30) sealing surfaces (14, 36) which are shaped such that the sealing gap formed between them increases in size inwards.
12. Combustion engine having an engine block (30) and an oil sump (10) attached thereto, characterized in that the oil sump (10) is attached to the engine block (30) with a curable composition (20) whose adhesion when cured is sufficient to secure the oil sump (10) to the engine block (30).
13. Combustion engine according to claim 12, characterized in that the composition (20) when cured has an adhesion of at least 0.5 N/mm^2 , especially of more than 0.8 N/mm^2 .
14. Combustion engine according to claims 12 or 13,

characterized in that the curable composition (20) is a silicone composition.

15. Combustion engine according to one of claims 12 to 14, characterized in that the oil sump (10) is stamped from sheet steel or made from plastics material and the engine block (30) consists of cast aluminum or grey cast iron.
16. Combustion engine according to one of claims 12 to 15, characterized in that threaded bolts are not used as fastening elements and in that the edge of the oil sump is designed such that a self-fixing takes place when the oil sump (10) is joined to the engine block (30).
17. Combustion engine according to claim 16, characterized in that the oil sump (10) has a fixing edge (16) and the engine block (30) has a flange (34) and in that the fixing of the oil sump (10) takes place by the snapping of the fixing edge (16) onto the flange (34).
18. Combustion engine according to claim 16, characterized in that barb-like tongues (18) which rest against a flange (34) on the engine block (30) are formed at the edge (12) of the oil sump (10).
19. Combustion engine according to claim 16, characterized in that there are formed on the oil sump (10) and on the engine block (30) sealing surfaces (14, 36) which are shaped such that the sealing gap formed between them increases in size inwards.
20. Flange connection with two flange elements between which a seal is made with a curable composition, characterized in that threaded bolts are not used as connecting elements.